

WHAT IS CLAIMED IS:

1. A lubricating oil supplying structure of an engine, comprising
a through hole formed on a lower portion of a crankcase, which is
5 secured to a cylinder of the engine, and which has a first holding room
receiving a crankshaft assembly therein; a first gear being arranged in
a second holding room of the crankcase, and connected with a shaft
part of the crankshaft assembly; a cam shaft assembly being movable
by the first gear for controlling a swing arm assembly of the engine;
10 the cam shaft assembly being received in a cam shaft case disposed in
the second holding room;
a fitting hole formed on the lower portion of the crankcase;
a lubricating oil container disposed under, and fixedly connected to the
crankcase; the oil container having lubricating oil contained therein;
15 an oil conduit firmly inserted in the fitting hole for the oil container to
communicate with the crankcase;
a check valve disposed over a lower end of the through hole; the check
valve being capable of sealing the through hole lower end when
subjected to an upward force; the check valve being movable away
20 from the lower end of the through hole when subjected to a downward
force;
whereby allowing the lubricating oil to be drawn into the crankcase via
the oil conduit when a piston of the engine is moving away from the

crankshaft assembly during a return stroke, and allowing lubricating oil in the crankcase to be pushed back into the container via the through hole when the piston is moving towards the crankshaft assembly during a forward stroke.

- 5 2. The lubricating oil supplying structure of an engine as claimed in claim 1, wherein the crankcase has a lower extension portion, which is formed with screw holes, while the oil container is secured to the lower extension portion of the crankcase by means of screwing bolts through the container and into the screw holes.
- 10 3. The lubricating oil supplying structure of an engine as claimed in claim 1, wherein a transverse hole is formed on the crankcase for the first holding room to communicate with the second holding room so that lubricating oil can be drawn into the second holding room via the transverse hole during a return stroke of the piston.
- 15 4. A lubricating oil supplying structure of an engine, comprising a transverse hole formed on a crankcase and communicating with both first and second holding rooms of the crankcase; the first holding room receiving a crankshaft assembly therein; a first gear being arranged in the second holding room of the crankcase, and connected
20 with a shaft part of the crankshaft assembly; a cam shaft assembly being movable by the first gear for controlling a swing arm assembly of the engine; the cam shaft assembly being received in a cam shaft case disposed in the second holding room;

a cover disposed over the swing arm assembly; the cover having a straight passage communicating with the second holding room of the crankcase; the cover having an air hole communicating with both a return flow chamber and a return flow hole of the swing arm assembly;

5 the cover having a through hole communicating with the straight passage; the cover having a transverse hole formed between, and communicating with both the through hole and the air hole;

a bead arranged between the through hole and the straight passage, and biased to abut an opening of the through hole by a spring; the bead

10 being forced to seal the opening of the through hole owing to negative pressure formed in the second holding room during a return stroke of a piston of the engine; the bead being forced to move away from the opening of the through hole owing to positive pressure formed in the second holding room during a forward stroke of the piston;

15 whereby allowing gas in the return flow chamber to be forced to travel into the second holding room via both the through hole and the straight passage during a return stroke of the engine, and allowing gas to flow into the return flow chamber via the return flow hole during a forward stroke of the piston such that gas provides stabilizing pressure,

20 and lubricating oil spray in the gas is provided to the swing arm assembly to lubricate same.